U.S. Department of the Interior Bureau of Land Management

Finding of no Significant Impact, Decision Record and Determination of NEPA Adequacy (DNA)

DOI-BLM-UT-G010-2015-0002 Newfield Production Company Horizontal APD 3-32-21-8-17H Infill Development within the Greater Monument Butte Unit

October, 2014

Location:
Township 8 South Range 17 East, Section 32, NENW

Applicant/Address:
Newfield Production Company
10530 South County Road #33
Myton, Utah 84052

PREPARING OFFICE

U.S. Department of the Interior Bureau of Land Management Vernal Field Office 170 S 500 East Vernal, UT 84078 (435) 781–4400 (435) 781–4410



Finding of no Significant Impact, Decision Record and Determination of NEPA Adequacy (DNA)

DOI-BLM-UT-G010-2015-0002

Newfield Production Company Horizontal APD
3-32-21-8-17H

Infill Development within the
Greater Monument Butte Unit

Prepared by U.S. Department of the Interior Bureau of Land Management

October, 2014

Table of Contents

Finding of No Significant Impact	vii
Finding of No Significant Impact:	vii
Mitigation Measures	vii
Signature:	viii
Decision Record - Memorandum	ix
Selected Action:	ix
Conditions of Approval:	
Rationale:	
Land Use Plan Conformance:	xi
Public Involvement:	
Signature:	xi
Appeal or Protest Opportunities:	
1. Determination of NEPA Adequacy (DNA)	1

Determination of NE	PA Adequacy
---------------------	-------------

List of Tables	
Table 1.1. List of Preparers	4
Table 1.2. Cooperating Agencies	4

October, 2014 List of Tables

Finding of No Significant Impact

Finding of No Significant Impact:

Based on the analysis of potential environmental impacts contained in environmental assessment DOI-BLM-UT-G010–2013–0243EA, and considering the significance criteria in 40 CFR 1508.27, I have determined that, with implementation of the mitigation measures listed below, Newfield Production Company's proposal to hozontally drill an oil well in the Greater Monument Butte Unit, Duchesne County, Utah, as described in the attached Determination of NEPA Adequacy DOI-BLM-UT-G010-2015-0002-DNA will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

Mitigation Measures

Air Quality

- 1. All internal combustion equipment shall be kept in good working order.
- 2. Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer. Dust suppressant such as magnesium chloride or fresh water may be used, as needed, during the drilling phase.
- 3. Open burning of garbage or refuse shall not occur at well sites or other facilities.
- 4. Drill rigs shall be equipped with Tier II or better diesel engines.
- 5. Low bleed pneumatics will be installed on separator dump valves and other controllers.
- 6. During completion, no venting can occur, and flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- 7. Telemetry will be installed to remotely monitor and control production.
- 8. When feasible, two or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters (m) from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, the proponent may demonstrate compliance with the 1-hour NO₂ National Ambient Air Quality Standards (NAAQS) with appropriate and accepted near-field modeling. As part of this demonstration, the proponent may propose alternative mitigation that could include but is not limited to natural gas—fired drill rigs, installation of NO_X controls, time/use restrictions, and/or drill rig spacing.
- 9. All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NO_X per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- 10. All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO_X per horsepower-hour.
- 11. Green completions will be used for all well completion activities where technically feasible.

Threatened, Endangered, or Candidate Species

Colorado River Fish Species

For protection of T&E Fish if drawing water from the Green River

- 1. The best method to avoid entrainment is to pump from an off-channel location one that does not connect to the river during high spring flows. An infiltration gallery constructed in a service approved location is best.
- 2. If the pump head is located in the river channel the following stipulations apply:
 - a. Do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes.
 - b. Limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 1).
 - c. Limit the amount of pumping, to the greatest extent possible, during the midnight hours (10pm to 2 am), as larval drift studies indicate that this is a period of greatest daily activity. Dusk is the preferred pumping time, as larval drift abundance is lowest during this time.
- 3. Screen all pump intakes with 3/32" mesh material.
- 4. Approach velocities for intake structures should follow the National Marine Fisheries Service's document "fish screening criteria for anadromous salmonids". For projects with an in-stream intake that operate in stream reaches where larval fish may be present, the approach velocity should not exceed 0.33 feet per second (ft/s).
- 5. Report any fish impinged on the intake screen or entrained into irrigation canals to the service (801.975.3330) or the Utah Division of Wildlife Resources:

Northeastern Region 318 N Vernal Ave, Vernal, UT 84078 Phone: (435)781-9453

Signature:

Approved by:

/s/ Jerry Kenczka	10/6/2014	
Authorized Officer	[Date]	
AFM for Minerals		

Decision Record - Memorandum

Selected Action:

It is my decision to authorize Newfield Production Company's proposal to horizontally drill a well from anexisting well pad in the Greater Monument Butte Unit, in Duchesne County, Utah, as described in the proposed action of DOI-BLM-UT-G010-2015-0002-DNA.

This decision is contingent on the implementation of the applicant committed measures in the surface use plan and the conditions of approval, derived from DOI-BLM-UT-G010–2013–0243EA listed below.

Summary of the Selected Alternative:

Newfield has submitted a Sundry Notice to change the previously Utah State approved well 3-32-8-17H, originally proposed only to extract State-owned minerals, from State Institutional Trust Lands (SITLA) surface to a Super Extended Lateral Well, the 3-32-21-8-17H, which will extract both State and Federal minerals. The well will be drilled from a 3.5 acre pad built under the auspices of the original State permit.

Conditions of Approval:

Air Quality

- 1. All internal combustion equipment shall be kept in good working order.
- 2. Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer. Dust suppressant such as magnesium chloride or fresh water may be used, as needed, during the drilling phase.
- 3. Open burning of garbage or refuse shall not occur at well sites or other facilities.
- 4. Drill rigs shall be equipped with Tier II or better diesel engines.
- 5. Low bleed pneumatics will be installed on separator dump valves and other controllers.
- 6. During completion, no venting can occur, and flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- 7. Telemetry will be installed to remotely monitor and control production.
- 8. When feasible, two or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters (m) from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, the proponent may demonstrate compliance with the 1-hour NO₂ National Ambient Air Quality Standards (NAAQS) with appropriate and accepted near-field modeling. As part of this demonstration, the proponent may propose alternative mitigation that could include but is not limited to natural gas—fired drill rigs, installation of NO_X controls, time/use restrictions, and/or drill rig spacing.

- 9. All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NO_X per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- 10. All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO_X per horsepower-hour.
- 11. Green completions will be used for all well completion activities where technically feasible.

Threatened, Endangered, or Candidate Species

Colorado River Fish Species

For protection of T&F Fish if drawing water from the Green River

- 1. The best method to avoid entrainment is to pump from an off-channel location one that does not connect to the river during high spring flows. An infiltration gallery constructed in a service approved location is best.
- 2. If the pump head is located in the river channel the following stipulations apply:
 - a. Do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes.
 - b. Limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 1).
 - c. Limit the amount of pumping, to the greatest extent possible, during the midnight hours (10pm to 2 am), as larval drift studies indicate that this is a period of greatest daily activity. Dusk is the preferred pumping time, as larval drift abundance is lowest during this time.
- 3. Screen all pump intakes with 3/32" mesh material.
- 4. Approach velocities for intake structures should follow the National Marine Fisheries Service's document "fish screening criteria for anadromous salmonids". For projects with an in-stream intake that operate in stream reaches where larval fish may be present, the approach velocity should not exceed 0.33 feet per second (ft/s).
- 5. Report any fish impinged on the intake screen or entrained into irrigation canals to the service (801.975.3330) or the Utah Division of Wildlife Resources:

Northeastern Region 318 N Vernal Ave, Vernal, UT 84078 Phone: (435)781-9453

Rationale:

The subject minerals were leased for oil or gas development under authority of the Mineral Leasing Act of 1920, as modified by the Federal Land Policy and Management Act of 1976, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The lessee/operator has the right to explore for oil and gas on the lease as specified in 43 CFR 3103.1-2, and if a discovery is made, to produce oil and/or natural gas for economic gain.

The selected alternative meets the BLM's need to acknowledge and allow development of valid existing leases. The BLM objective to reduce impacts is met by the imposing of resource protection measures to protect other resource values.

Land Use Plan Conformance:

The selected alternative is in conformance with the BLM Utah Vernal Field Office Approved Resource Management Plan and Record of Decision (2008) and the terms of the applicable leases.

The Proposed Action is consistent with the Duchesne County General Plan (2005) which encompasses the Project Area. The county's plans contain specific policy statements addressing public lands (i.e. multiple-use, resource use and development, access, and wildlife management). In general, the county's plan indicate support for development proposals, such as the Proposed Action, through its emphasis of multiple-use of public land management practices, responsible use, and optimum utilization of public land resources. The county, through its plan, supports the development of natural resources as they become available or as new technology allows.

There are no comprehensive State of Utah plans for the vicinity of the selected alternative. However, the State of Utah School and Institutional Trust Lands Administration (SITLA) have leased much of the nearby state land for oil and gas production. Because the objectives of SITLA are to produce funding for the state school system, and because production on federal leases could further interest in drilling on state leases in the area, it is assumed that the selected alternative is consistent with the objectives of the State.

Public Involvement:

The proposed project was posted on BLM's National Land Use Planning and NEPA Register on October 1, 2014. No public requests for information on the project or public comments were received.

Signature:

Authorizing Official:

/s/ Jerry Kenczka	10/6/2014
Authorized Officer	Date

Appeal or Protest Opportunities:

This decision is effective upon the date it is signed by the authorized officer. The decision is subject to appeal. Under BLM regulation, this decision is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this decision must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, Utah State Office, P.O. Box 45155, Salt Lake City, Utah, 84145-0155, within 20 business days of the date this Decision is received or considered to have been received.

If you wish to file a petition for stay, the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

- 1. The relative harm to the parties if the stay is granted or denied;
- 2. The likelihood of the appellant's success on the merits;
- 3. The likelihood of irreparable harm to the appellant or resources if the stay is not granted; and,
- 4. Whether the public interest favors granting the stay.

Chapter 1. Determination of NEPA Adequacy (DNA)

Worksheet

U.S. Department of the Interior Bureau of Land Management

OFFICE:: Vernal FO, LLUTG01000

TRACKING NUMBER: DOI-BLM-UT-G010-2015-0002-DNA

CASEFILE/PROJECT NUMBER: UTU-76956

PROPOSED ACTION TITLE/TYPE: Newfield Production Company Horizontal APD 3-32-21-8-17H

LOCATION/LEGAL DESCRIPTION: Township 8 South Range 17 East, Section 32, NENW

APPLICANT (if any): Newfield Production Company

A. Description of Proposed Action and any applicable mitigation measures

Newfield has submitted a Sundry Notice to change the previously Utah State approved well 3-32-8-17H, originally proposed only to extract State-owned minerals, from State Institutional Trust Lands (SITLA) surface to a Super Extended Lateral Well, the 3-32-21-8-17H, which will extract both State and Federal minerals. The well will be drilled from a 3.5 acre pad built under the auspices of the original State permit.

Drilling Operations

Wells would be drilled utilizing a conventional, mechanically-powered mobile drilling rig. The exact type and size of drilling rig would be dependent upon rig availability at the time of project implementation. Newfield anticipates that no more than one drilling rig would be operating in the Project Area at any one time. Each well would take approximately 3 days to drill.

The proposed wells would target sandstone intervals within the Green River Formation and the average depth of each well would be approximately 6,300 feet. Any shallow water zones encountered during drilling would be isolated by both casing and cement. All potentially productive hydrocarbon zones would be cemented and tested. The casing and cementing program would be designed to isolate and protect the shallower formations encountered in the well bore and to prohibit pressure communication or fluid migration between zones. In addition, the cement would protect the well by preventing formation pressure from damaging the casing and retarding corrosion by minimizing contact between the casing and formation fluids. The type of casing used and the depth to which it is set would depend upon the physical characteristics of the formations that are drilled. Surface casing would be installed to protect near-surface aquifers. Production casing would subsequently be installed to the total depth. All casing would be new or reconditioned and tested in accordance with applicable regulations. Site-specific descriptions of drilling procedures are included in the Applications for Permits to Drill (APDs) previously submitted to the BLM.

Well Completion and Production

If drilled wells indicate economic potential, completion operations would commence. Completion operations would involve setting production casing to the total drilled depth and perforating the casing in target production zones, followed by hydraulically fracturing (fracing) the productive formation under high pressure. The fracing material would likely contain sand or other propant material to keep the fractures open, thereby allowing hydrocarbons to flow more freely into the casing. The next phase would be to flow and test the well to determine rates of production. Completion and testing would take approximately 18 days per well.

Should testing suggest the potential for commercial production, facilities including a wellhead, pumping unit, separator, dehydrator, and condensate tanks would be installed at each location. All permanent (on site for 6 months or longer) structures constructed or installed would be painted Covert Green. All facilities would be painted within 6 months of installation.

Periodically, a workover or recompletion on a well may be required to ensure that efficient production is maintained. Workovers can include repairs to the well bore equipment (casing, tubing, rods, or pump), the wellhead, or the production facilities. These repairs would usually be completed in 7 days per well, during daylight hours. The frequency for this type of work cannot be accurately projected because workovers vary by well; however, an average work time may be one workover per well per year after about five years of production. In the case of a recompletion, where the wellbore casing is worked on or valves and fittings are replaced to stimulate production, all byproducts would be stored in tanks and hauled from the location. For workover operations, it may be necessary to rework the existing surface location to accommodate equipment. At the completion of the work, the surface location would be re-graded to pre-work contours and reclaimed.

Water Supply

Typically, 13,500 bbls (1.75 acre-feet) of water would be required to drill and complete an individual Green River Formation well, so total water use for drilling and completion of the well would be about 1.75 acre-feet.

Water for drilling the proposed wells would come from an underground water well (Johnson Water District - Water Right 43-10136), Neil Moon Pond (Water Right 43-11787), Tributary to Pleasant Valley Wash (Maurice Harvey Pond - Water Right 47-1358), or the Green River

Produced Water Disposal

(Newfield Collector Well - Water Right 47-1817). Water would be hauled by a licensed trucking company. Water wells would not be drilled on the leases.

Upon completion of a productive well, all produced water would be confined to a steel storage tank. If the production water meets water quality standards, it would then be transported to the Ashley, Monument Butte, Jonah, South Wells Draw, or Beluga water injection facilities by company or contract trucks unless and until the well is serviced by a flowline. The produced water would then be injected into approved Class II wells to enhance Newfield's secondary recovery water flood project. Water not meeting water quality standards would be disposed of at Newfield's Pariette No. 4 disposal well (Section 7, T9S R19E). Federally approved surface disposal facilities or at State of Utah approved surface disposal facilities.

B. Land Use Plan Conformance

LUP Name* Vernal Field Office Date Approved: October 2008

Resource Management

Plan

Insert Date Approved

Other Document Name, if applicable
Insert Other Document

Insert Other Document Date Approved: Insert Date Approved

Name, if applicable

The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decisions:

The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions):

• Meet local and national non-renewable and renewable energy and other public mineral needs. (p. 97)

C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

List by name and date all applicable NEPA documents that cover the proposed action.

Newfield APD GMBU 104-5-9-17; DOI-BLM-UT-G010-2013-0243 7/11/2013.

List by name and date other documentation relevant to the proposed action (e.g. biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring report).

D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Yes. The proposed action originally analyzed was to drill a directional well from an existing pad about 3/4 mile to the south in the same section. GIS data reveals that there are similar resource issues and conditions.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource value?

^{*}List applicable LUPs (for example, resource management plans; activity, project, management, or program plans; or applicable amendments thereto

Yes. The existing NEPA documented analyzed a proposed action and no-action alternative. There are no concerns that would require any additional alternatives.

3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessments, recent endangered species listings, updated lists of BLM sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

Yes. The existing document was prepared in July 2013. Since that date there are no new circumstances that would change the analysis.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes. The actions are essentially the same.

5. Are there public involvement and interagency reviews associated with existing NEPA document(s) adequate for the current proposed action?

The existing action was posted on the Utah Environmental Notification Bulletin Board in July, 2013. No public interest was expressed.

E. Persons/Agencies/BLM Staff Consulted

Table 1.1. List of Preparers

Name	Role	Discipline
Sheri L. Wysong	Team Lead,	Physical Scientist
Stephanie Howard	P&EC,	Planning & Environmental
		Coordinator

Note

Refer to the EA/EIS for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents.

Table 1.2. Cooperating Agencies

Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirement of NEPA.

/s/ Sheri Wysong	
Signature of Project Lead	

Date

/s/ Stephanie Howard	
Signature of NEPA Coordinator	

/s/Jerry Kenczka 10/06/2014

Signature of the Responsible Official

Note:

The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute and appealable decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.